

SAFE WATER.

Postal Customer City of Cudahy Wisconsin 53110 Cudahy Water Utility Water Quality Report

> Special Health Information Available

Cryptosporidium

Cryptosporidium is a microscopic protozoan that, when ingested, can cause diarrhea, fever and other gastrointestinal symptoms. Scientific knowledge about Cryptosporidium shows that it is naturally present in surface water supplies are especially vulnerable if they receive runoff or pollution from human or animal waste. The Cudahy Water Utility tests untreated Lake Michigan water monthly for Cryptosporidium using current test methods. In 2005, monthly samples of untreated Lake Michigan water were collected and tested for Cryptosporidium. No collected and tested for Cryptosporidium. No evidence of cryptosporidium was found.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV \AIDS or other immune system disorders, some elderly and infections. These people should seek advice from their health care providers. EPA\CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).



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### Dear Water Utility Customer:

This 2010 Water Quality Report describes the City of Cudahy's drinking water source, drinking water quality, and programs that are in place to protect the high quality of our water.

This report complies with federal regulations included in the 1996 Amendments to the Safe Drinking Water Act which require all water utilities to provide this information annually. The Cudahy Water Utility supported passage of the 1996 Amendments and believes that the information in this Water Quality Report will provide a valuable service to all of its customers.

The information contained in this report is also routinely submitted to the Wisconsin Department of Natural Resources and to the United States Environmental Protection Agency. Both of these agencies monitor the Utility's compliance with the many regulations that have been established to assure the community of safe drinking water.

Sincerely,

Tony Day, Mayor Frank Miller, Water Superintendent

# The Cudahy Water Utility

The Cudahy Water Utility was established in 1947. It has a 6.0 million-gallon per day conventional surface water treatment plant that uses Lake Michigan as a water source. The treatment plant uses a combination of chlorine disinfection; coagulation, flocculation, sedimentation, filtration and UV disinfection to provide clean safe water to the City of Cudahy. For more information on this report or on the water treatment process, please call 769-2235.

The utility supplies an average of 2.5 million gallons of treated water to the city and 1.0 million gallons of untreated water to industrial customers each day. The water is delivered via 58 miles of watermains and 5,585 metered connections.

#### LEAD IN DRINKING WATER

**2010 Water** 

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Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%.

When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

#### STEPS TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Despite our best efforts to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water.

For more information on having your water tested, please call (414) 769-2234.

## ULTRAVIOLET DISINFECTION

In December 2003 the Cudahy Water Utility began the installation of a UV Disinfection System in an effort to add an extra safety measure to the Cudahy water supply. The installation of the UV system was the result of several years of research and work by utility staff, consulting engineers and water industry researchers.

How does it work?

UV systems use specialized lamps that produce ultraviolet light at precise wavelengths. The lamps are contained in a reactor through which the water flows. As the water flows past the UV lamps any microorganisms in the water are exposed to a lethal dose of UV light that alters their DNA so they cannot reproduce, which renders them harmless.



- 1. Maximum contaminant level goal (MCLG) The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- 2. Maximum contaminant level (MCL) The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.
- 3. Treatment technique (TT) A required process intended to reduce the level of a contaminant in drinking water.
- 4. Action Level (AL) The concentration of a contaminant which, if present, triggers a treatment or other requirement which a water system must follow.
- PPM Part per million
- 6. PPB Part per billion
- 7. Trihalomethanes by-products of the disinfection process; chloroform, bromochloromethane dibromochloromethane, and bromoform.
- 8. NTU Nephelometric Turbidity Units, a unit to measure turbidity or suspended solids in water.
- 9. Pci/L Picocuries per liter is a measure of radioactivity in water. A picocurie is 10 to the power of –12 curies.
- 10. Inorganic Contaminants Chemical substances of mineral origin such as lead or copper.
- 11. Organic Contaminants Naturally occurring OR synthetic substances containing mainly carbon, hydrogen, nitrogen and oxygen. This includes most pesticides and industrial chemicals.

The test results in this report show that there are low levels of some contaminants found in Cudahy water. Is this safe?

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. The presence of these contaminants does not necessarily indicate a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking water Hotline (800-426-4791)

